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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NOBAHAR, ABDULHAKIM

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 04/01/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/419,350

Applicant(s)

ROBINS ET AL.

Examiner

Abdulhakim Nobahar

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. This communication is in response to applicant's response received on January 12, 2004.
2. The amendments to claims 1, 6, 12, 16, 17, 21, 26, 28, 29, 33, 38 and 40 are acknowledged and that these amendments do not introduce any new matter to the claimed invention.
3. Claims 41-44 are newly added and no new matter has been introduced.
4. Applicants' arguments have been fully considered but they are not persuasive.
5. In response to applicants' arguments on page 16, lines 10-12 that Hacherl does not teach or suggest "circuitry for automatically switching control of said system from said first PE to said second PE upon detection of a failure of said first PE" and on page 17, lines 3-4 that Hacherl fails to teach "detection of a failure", Hacherl teaches a system to switch exclusive authority (i.e., role owner such as pre-defined master server) from one controller (corresponding to the recited processing engine) to another controller in a network (corresponding to the recited circuitry) (see, abstract and col. 1, lines 43-67). Hacherl teaches that the transfer of role owner from one machine to another machine is implemented easily when there is a need and this is done through

the server (corresponding to the recited processing engine) operating system's replication functionality (corresponding to the recited automatically switching control) (see, for example, col. 9, line 66-col. 10, line 40). It would be futile for the continuous and smooth operation of a network with a plurality of controllers, if a mechanism to detect failure of a domain controller and automatic transfer of a particular role owner to another machine when a machine which has that particular authority (such as being master domain controller) fails or crashes is not implemented. On page 17, lines 5-7, applicants argue that in Hacherl's system a system administrator manually transfers authority of domain controller from one machine to another machine. A system administrator performs this function when a controller is scheduled for maintenance or when it is deliberately planned to change the role of a machine (see, col. 11, lines 16-50 and col. 12, line 66-col. 13, line 19).

6. In response to applicants' argument on page 17, lines 14-16 that Hacherl does not disclose or teach "a password passer writing said enable password of said first PE to the fourth memory accessible by said second PE," as recited in claim 1, Hacherl teaches a replication mechanism that updates changes from a given replica to all other replicas and the replicas are writeable (see col. 5, lines 25-35). For example, if the password to the master controller (corresponding to the recited first processing engine) is changed, the new password is replicated to other controller(s) (corresponding to the recited second processing engine) (see, col. 9, lines 20-23). The replica is a database that contains information (such as a password corresponding to the recited enable

password) (see, col. 3, lines 16-19 and col. 8, lines 53-59) and normally stored on the hard drive of the computers. The process of replicating a changed password by a master controller to the replica of another controller corresponds to the recited writing of the new password of first PE to the fourth memory of the second PE.

7. In response to applicant's argument on page 20, lines 1-6 that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as established above Hacherl teaches a computer network system that transfers the role owner (authority) to another machine when a machine with role owner fails or crashes. What Hacherl does not expressly teach is providing a password keeper or a password server. Kung the secondary reference teaches a distributed networked computing system (see abstract) having a central server that holds encrypted passwords (i.e., protecting passwords as the title of applicants claimed invention implies). Kung further teaches that when a user desires to use a particular computer, logon requests are processed by the multiple logon procedure and it accesses the stored file that contains the encrypted password, decrypts the password, accesses the remote computer, and logs the user onto that computer (see abstract and Figs 1-3).

Art Unit: 2132

Kung also teaches that the user can access the encrypted password file on the central server from a second computer (see abstract). The process of multiple logon procedure in Kung system for obtaining the protected password implies that the password is an enable password that allows users to get into a privilege mode in accessing network resources. Thus, Kung's teaching corresponds to the recited a password keeper for maintaining said enable password in said memory for said first and second PEs.

Therefore, the combination of Hacherl and Kung would result in the invention embodied in claim 6.

8. With regard to rejection of claim 40, applicants on page 22, lines 4-12, applicants present arguments similar to arguments presented for the rejection of claim 6. Alonso provides an access control server (an AAA server) connected to the network (Fig. 1) that keeps passwords in the form of hash value (see, for example, col. 3, lines 22-44, col. 9, lines 1-9 and col. 24-50). Therefore, the combination of Hacherl and Alonso would result in the invention embodied in claim 40.

9. However, in light of the above submission, examiner maintains the previous claims rejections under 35 USC § 102 and 35 U. S. C. § 103 (a) including the new claims 41-44.

Previous Rejection including the new claims 41-44:

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 17-25, 29-32 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Hacherl (6,324,571 B1).

Regarding claims 1-3, 5, 17-19, 21-23, 29-31 and 41, Hacherl discloses a system for switching exclusive authority (such as domain controller role corresponding to the recited control of high reliability computer system) to perform a particular system-wide task between multiple servers in a network of computers (corresponding to the recited circuitry) (see, for example, column 2, lines 2-22 and col. 8, lines 21-29). This system also is applicable in other computer system configurations such as multi-processor systems (corresponding to the recited processing engines) (see column 3, lines 43-48). As shown in Fig. 1, the system memory of each computer system includes RAM and ROM that stores BIOS. The BIOS contains routines (corresponding to the recited initialization information) that help to transfer information between elements within the computer, such as during start-up (see, for example, column 3, line 64-column 4, line 11). Hacherl discloses that each computer system further includes hard disk drive for storing information including application programs, operating system and data such as password (see, for example, column 4, lines 29-34 and column 9, lines 21-23). The ROM memory and the hard disk drive in each computer system correspond to the recited first and third memories accessible by first PE and second and fourth memories accessible by second PE, respectively.

Hacherl further discloses a mechanism for promoting a server to become the master controller in the network, in case the original master, for example, crashes (see, for example, column 11, lines 34-60). This mechanism (or process) corresponds to the recited circuitry for automatically switching control from first PE to second PE.

Hacherl also discloses a PDC advertiser (corresponding to the recited password passer) that replicates (updates) the password (corresponding to the recited enable password) onto other controller (see, for example, column 9, lines 16-32 and column 12, lines 50-60) whenever the password is changed including at the initialization of the system which normally a new password is introduced.

Regarding claims 4, 20, 24, 25 and 32, Hacherl discloses that a domain controller may request replication data from another domain controller (see, for example, column 7, lines 27-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-16, 26-28, 33-39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hacherl (6,324,571 B1) in view of Kung (5,241,594).

Regarding claims 6, 7, 10, 12-16, 26-28, 33-35, 38-39 and 42, Hacherl discloses a system for switching authority between multiple servers in a network according to that embodied by claims 1-5. However, Hacherl does not expressly disclose a password keeper or a password sever for maintaining the password in a password memory accessible by first and second PEs.

Kung does disclose a database (corresponding to the recited password memory) in a server (corresponding to the recited password keeper or password server) for holding the encrypted password accessible by clients (see, for example, column 2, lines 15-21, column 2, lines 33-46 and column 4, lines 22-29). This server includes an interface for communicating the password to the clients and this server allows authentication of users attempting to access resources on the network computers (see, for example, column 4, lines 34-37).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a server (password keeper) as taught in Kung in the system of Hacherl, because it would provide a safe and user-transparent method and means for authenticating users in a distributed computing system that does not require special purpose hardware development (see column 2, lines 5-10).

Regarding claims 8 and 9, Hacherl describes that generally the program modules including routines such as BIOS (initialization information) in a computer perform particular task by executing instructions (see column 3, lines 35-51). Thus it is inherent that every server (PEs) in Hacherl's system includes instructions in the BIOS routines

Art Unit: 2132

of the server to instruct the server (password keeper) for writing the password in the database (memory).

Regarding claims 11, 36 and 37, this claim is rejected as applied to the like elements of claims 4, 20, 24, 25 and 32 above.

Claims 40, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hacherl (6,324,571 B1) in view of Alonso et al (6,434,700 B1).

Regarding claim 40, Hacherl discloses a system for switching authority between multiple servers in a network according to that embodied by claims 1-5.

However, Hacherl does not expressly disclose the use of an AAA server to store an enable password in a database and authenticating the users attempting to access resources on the network.

Alonso does disclose a computer network system that includes an AAA server as an access control server that authenticates and authorizes the users in a centralized fashion (see, for example, column 5, line 60-column 6, line 5). The AAA server contains a database for storing the password that is used for authenticating the users (see, for example, abstract, col. 4, lines 7-26 and column 6, line 62-column 7, line 15) and it includes an interface for communicating with other computers via an information bus (see, for example, column 3, lines 3-10 and column 9, line 66-column 10, line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include an AAA server (password keeper) as taught

in Kung in the system of Hacherl, because it would provide a mechanism that can receive and authenticate any kind of passwords within a system that a user may use (se column 4, lines 1-4).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdulhakim Nobahar whose telephone number is 703-305-8074. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Abdulhakim Nobahar
Examiner
Art Unit 2132

AN
March 25, 2004



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